

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS**

EXPRESS MOBILE, INC.,

Plaintiff,

v.

SVANACO, INC.,

Defendant.

Civil Action No. 2:17-cv-00130
(Lead)

JURY TRIAL DEMANDED

BIGCOMMERCE, INC.,

Defendant.

Civil Action No. 2:17-cv-00160
(Consolidated)

PLAINTIFF EXPRESS MOBILE, INC.'S OPENING CLAIM CONSTRUCTION BRIEF

Timothy Devlin (DE 4241)
Robert Kiddie
1306 N. Broom Street, First Floor
Wilmington, DE 19806
(302)-449-9010
tdevlin@devlinlawfirm.com
rkiddie@devlinlawfirm.com
Counsel for Express Mobile, Inc.

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I. INTRODUCTION

Pursuant to this Court’s pending Docket Control Order (Dkt. 75), Plaintiff Express Mobile, Inc. (“Express Mobile”) respectfully submits this Opening Claim Construction Brief related to the disputed claim terms in the two patents-in-suit: U.S. Patent Nos. 6,546,397 (“‘397 patent”) and 7,594,168 (“‘168 patent”) (Exs. 1 and 2, respectively).¹

For each disputed term or phrase, Express Mobile’s construction is consistent with both the intrinsic and extrinsic evidence, and avoids introducing extraneous limitations. Each Express Mobile construction comports with the language of the claims, the teachings of the specification, and the prosecution history. Each is also fully consistent with the understanding of one of ordinary skill in the art, as set forth in the evidence below and the supporting Declaration of one of the industry’s leading experts, Mr. Andre Kruetzfeldt.

In contrast, Defendant BigCommerce, Inc. (“Defendant”) repeatedly violates basic rules of claim construction. In some cases, Defendant seeks to limit the claims to preferred embodiments of the specification. Even worse, for some terms Defendant’s proposal would exclude preferred embodiments of the specification. Defendant seeks to bootstrap these arguments with reference to the prosecution history, but as set forth below, not only does the prosecution history fail to establish any “clear and unmistakable” disavowal of claim scope, it actually supports the constructions proposed by Express Mobile.

II. BACKGROUND OF THE ASSERTED PATENTS

A. Express Mobile and Inventor/CEO Steve Rempell

Express Mobile is an operating entity founded in 2007. (Rempell Decl. at ¶ 4.) It develops browser-based and native application publishing platforms. (*Id.* at ¶ 4.) Express

¹ Unless otherwise indicated, Exhibits cited in this Brief refer to the Exhibits attached to the co-filed Declaration of Timothy Devlin in Support of Plaintiff Express Mobile, Inc.’s Opening Claim Construction Brief.

Mobile continues to work and partner with technology companies to develop innovative solutions to technological problems faced by its customers. (*Id.* at ¶ 5.)

The asserted patents are the result of extensive effort by their inventor, Steve Rempell. Mr. Rempell is a 35-year veteran of Silicon Valley and brings more than fifty years of experience in innovative computer technology. (*Id.* at ¶ 3, 6.) He has intimate experience with prior art website development systems, including their limitations and flaws. (*Id.* at ¶ 9.) Mr. Rempell is an experienced code developer, and in the late 1990s he built working embodiments of the inventions comprising software that spanned over 61,000 lines of code. (*Id.* at ¶ 9-10.) Indeed, Figures 23 and 37-63 of the Express Mobile patents are not mock-ups, but actual screen shots of the patented inventions, as implemented by Mr. Rempell at the time. (*Id.* at ¶ 10.)

B. The Pioneering Nature of Express Mobile's Patented Inventions

The Express Mobile patents bring together a number of disparate ideas and concepts, to create a new paradigm for creating, storing, and building web pages. These features and concepts are set forth in roughly 64 columns of patent specification (excluding the background section and patent claims), along with more than 60 figures.² The massive specification was necessary to lay out in sufficient detail all the features and concepts in what was, before then, a completely unconventional way of creating and rendering web pages. As such, the patents have the breadth typical of pioneering inventions.

Prior to the invention of the Express Mobile patents, web pages were created, stored and rendered in a fundamentally different manner. (Kruetzfeldt Decl. at ¶ 18.) Specifically, web pages were typically created by either programming directly in HTML or JavaScript code, or by using a visual editor that output HTML files. The result of either creation technique was a collection of pages of computer code or “pseudo code”—typically HTML, JavaScript, or Java

² Apart from ministerial items, the ‘397 patent and ‘168 patent share a common specification. Unless otherwise specified, citations to the specification are made to the ‘397 patent (Ex. 1).

applets—which defined the visual layout, style and page logic in a manner that was compatible with the Internet standards at the time. (*Id.* at ¶ 19.) These code files defined all the fixed parameters of the web page, for example the formatting and location of text; or the location, size and aspect of pictures. While content (for example, photographs) could be dropped into certain placeholders, the overall structure of the web page was fixed by the code. (*Id.* at ¶ 20.)

These earlier methodologies suffered from a number of flaws. First, creation of the web page could be cumbersome, in particular when web pages could not be viewed during the creation process as they would later appear in various browsers or devices. (*Id.* at ¶ 21.) Moreover, each individual web page of a website needed to be stored in its HTML or pseudo-code form. Storage of individual pages in this manner was inefficient, and so wasted space and required longer access times. (*Id.* at ¶ 22.) The size and formatting of the stored files also led to slow downloading of the web page file to a user’s computer, and slower rendering by the browser, increasing the dreaded wait time for a page to load. (*Id.* at ¶ 22.)

Lastly, when rendered on different operating systems or browsers, web pages would often display errors or unnecessary whitespace. (*Id.* at ¶ 23.) One partial solution to this last issue would be to design multiple alternative web pages for the most common combinations of operating system/browser/device, etc; at least for some of the most glaring errors. (*Id.* at ¶ 23.) But of course this “solution” severely impacted the productivity of web designers when creating and later editing web pages, and only partially solved the problem.

Many of these issues are documented in the Background section of the Express Mobile patents. The patents note that the traditional languages such as HTML and JavaScript were generally limited, inflexible and slow:

Conventional mark-up and scripting languages have not been designed for serious multimedia applications. They have almost no file handling ability and very little computational power. In addition, they are remarkably slow and inefficient.

(Ex. 1 at 1:17-21.)

The result, as the patents note, is inflexible rendering of the web page on a screen, with attendant formatting errors and wasted screen space:

For example, HTML and JavaScript are incapable of reformatting text and scaling buttons or images dynamically. In addition, most conventional web publishing applications design a web page layout to fit into a 640 pixel wide screen. This means that the ability for higher resolution screens to display more data horizontally is lost. ***Since capability is wasted on the horizontal plane, unnecessary vertical scrolling may be required. Further, on higher output resolution devices (screens), unsightly extra white space or background may be prevalent.***

(Ex. 1 at 1:40-49.)³

Mr. Rempell took a radically new approach. In the Express Mobile patented invention, a user selects various settings that define a web page. (Kruetzfeldt Decl. at ¶ 25.) Rather than create and store the web page code, the systems stores information representative of the settings in a database. (*Id.* at ¶ 25.) Later, when a browser is pointed to a web page, that representative information is downloaded, and then the web page code is constructed on the fly for the browser through the use of a “virtual machine” and one or more “run time files.” (*Id.* at ¶ 26.)

To offer an analogy, prior art methods of web development were akin to building a picture frame, storing the frame, and then sending it to a user when requested. While a user could insert printed photographs into the existing frame, the frame itself (the HTML file) is already constructed, and accepts a picture of a specific size. (*Id.* at ¶ 27.) The invention of the Express Mobile patents is fundamentally different. It stores a blueprint for the picture frame, and sends that blueprint when requested. Each frame is then built on the fly. Depending on the user’s screen size and resolution, the entire “picture frame” might be constructed with different dimensions, fonts, etc. (*Id.* at ¶ 27.) This approach to web publishing was radically different from

³ Unless otherwise indicated, emphasis in this Brief has been added.

conventional methods and only made possible by bringing together multiple different concepts, ideas and features as claimed in the Express Mobile patents. (*Id.* at ¶ 28.)

The advantages of Mr. Rempell's invention are substantial. For example, because web pages are generated using a runtime engine (related to the virtual machine) and the user settings, the information downloaded by a browser has a smaller footprint, and editing is simpler:

In contrast, the claimed invention generates web pages using two features: a run time engine and a database of user settings. As described in the specification of the claimed invention, the database contains user settings, which may be thought of as attributes of display objects. The run time engine is used to accept the attributes and generate virtual machine commands, which then generate a display. ***In addition to having a smaller "footprint" (code size which is transmitted for display over a communication system), changes to the code during production are more easily implemented.***

(Ex. 3 at 5.)

Additionally, the invention enables scaling (sizing) of web pages along with elements within the web page, to more efficiently use the screen space:

When the web site/web page is accessed on the WWW, ***web page scaling technology can be accessed to generate web pages that are scaled to the user's screen resolution.*** A technique is provided so that an applet's size (height and width) can be set in real time under the control of either the interface or the build engine.

(Ex. 1 at 2:43-48.) The result is a vastly improved system for creating, storing, and rendering web pages.

Mr. Rempell's invention was ahead of its time, but eventually the industry caught up. The original priority application for the Express Mobile patents was filed in 1999. (*See* Ex. 1.) More than a decade later, his patented ideas were widely adopted through the implementation of "HTML 5," which has become the industry standard for web development and browser functionality around 2010-2012. (Kruetzfeldt Decl. at ¶ 29.)

Around the time of Mr. Rempell's invention, other companies were also making efforts to circumvent the limitations of conventional web publishing models. A patent issued to Sun

Microsystems, U.S. Patent No. 5,842,020 to Faustini (“Faustini,” Ex. 4), represented one such attempt. (Kruetzfeldt Decl. at ¶ 30.) This was a primary reference asserted against the Express Mobile claims during prosecution. (*See, e.g.*, Ex. 5 at 2-3; Ex. 6 at 2-13.) However, while Faustini made use of run time files and Java virtual machines, it lacked the radically inventive features of the Express Mobile patents, such as defining the web page as a collection of user settings, storing information related to those settings in a database, and then later using that information to render the web page. (Kruetzfeldt Decl. at ¶ 30.)

C. The Prosecution History Confirms the Broad Scope of the Invention

The prosecution history of the Express Mobile patents confirms their breadth.

The application leading to the ‘397 patent was filed on December 2, 1999, with only a single omnibus claim included. That omnibus claim was rejected based primarily on Faustini.

Following that rejection, the original claim was cancelled, and a variety of new claims were added to recite the features largely recited in the ‘397 patent. Claim 2 is exemplary:

An apparatus for producing Internet websites on and for computers having a browser and a virtual machine capable of generating displays, said apparatus comprising:

(a) ***an interface to present a viewable menu of user selectable panel of settings to describe elements on a website***, said panel of settings being presented through a browser on a computer adapted to accept one or more of said selectable settings in said panel as inputs therefrom, and where at least one of said user selectable settings in said panel corresponds to commands to said virtual machine;

(b) a browser to generate a display in accordance with one or more user selected settings substantially contemporaneously with the selection thereof;

(c) ***a database for storing information representative of said one or more user selected settings***; and

(d) ***a build tool for generating one or more web pages of said website***, where at least one of said one or more web pages includes at least a portion of said database and run time files, ***where said run time files include virtual machine commands for interpreting at least a portion of said database to present at least a portion of said website on said display.***

(Ex. 7 at 2.)

This amendment introduced the feature of a “virtual machine” in the claims. As set forth below, virtual machines were well known in the industry at the time of the invention, and one of skill in the art would understand the breadth of the term. Defendant argues, largely based on the prosecution history, that the term “virtual machine” (and the term “run time engine”) should be limited to components that utilize only one type of computer code, namely “compiled code,” as an input. But the term “compiled code” appears *nowhere* within the claims added during prosecution, nor in the Applicant’s remarks. And as set forth in more detail below, the Applicant’s full remarks support a broad reading of the terms “virtual machine” (and again, “runtime engine” as well).

The added claims were again rejected, primarily on the basis of Faustini. In response, the last element of the claims was clarified to confirm patentability over Faustini. Again, Claim 2 is exemplary, with the last element amended as follows:

(d) a build tool **having at least one run time file** for generating one or more web pages [of said website, where at least one of said one or more web pages includes at least a portion of said database and run time files], **said run time file operating to utilize information stored in said database to generate commands to said virtual machine for generating the display of at least a portion of said one or more web pages** [where said run time files include virtual machine commands for interpreting said at least a portion of said database to present at least a portion of said website on said display].

(Ex. 3 at 10) (emphasis in original to show additions in bold and deletions in brackets).

In the accompanying remarks, the Applicant confirmed the basis for distinction over Faustini, which had nothing to do with “compiled code” (as Defendant now argues), but instead related to the same features and advantages described above. Specifically, information related to user settings is stored in a database, and that information is later downloaded and used on the fly to generate a web page display:

In contrast [to Faustini], the claimed invention generates web pages using two features: a run time engine and a database of user settings. As described in the specification of the claimed invention, the database contains user settings, which

may be thought of as attributes of display objects. The run time engine is used to accept the attributes and generate the virtual machine commands, which then generate a display.

(Ex. 3 at 5.)

This arrangement has the advantages of a smaller footprint (and thus easier storage and faster download times), and more efficient web page creating and editing:

In addition to having a smaller “footprint” (code size which is transmitted for display over the communication system), changes to the code during production are more easily implemented.

(Ex. 3 at 5.)

As with the original amendment and remarks, the term “compiled code” appears *nowhere* within the amended claims or the Applicant’s remarks in this second response. The claims were then allowed, and the ‘397 patent issued with the examiner acknowledging that the closest prior art of record “do[es] not show a run time file utilizing user selected settings stored in a database to generate virtual machine commands for generating web sites as recited.” (Ex. 8 at 2.)

The ‘168 patent is a continuation of the ‘397 patent. It does not recite a “virtual machine” but instead the related concept of a “runtime engine” and additional elements. The Applicant’s amendments and remarks in prosecution focused on the same general distinctions over the prior art that were noted during prosecution of the ‘397 patent. (*See* Ex. 9 at 10-13.) The Examiner’s reasons for allowance again echoed those same distinctions. (*See* Ex. 10 at 4.) As with the ‘397 patent, nothing in the Applicant’s amendments or arguments related to the ‘168 patent had anything to do with the notion of “compiled code.”

III. ARGUMENT

A. Legal Standards

Claim construction is a matter of law. *Markman v. Westview Instr., Inc.*, 517 U.S. 370, 384 (1996), and must always begin with the words of the claim itself. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc). There is a “heavy presumption that claim terms

are to be given their ordinary and customary meaning” because “the words of the claims themselves . . . define the scope of the patented invention.” *Aventis Pharms., Inc. v. Amino Chems. Ltd.*, 715 F.3d 1363, 1373 (Fed. Cir. 2013).

In the context of claim construction, “ordinary and customary” means how a person of skill in the art at the time of the invention would have understood the term as it is used in the claim. *Phillips*, 415 F.3d at 1313. Where the ordinary meaning of claim language is readily understood by a person of skill in the art, claim construction “involves little more than the application of the widely accepted meaning of commonly understood words.” *Id.* at 1314.

When necessary to construe a claim, intrinsic evidence is typically “the single best guide to the meaning of a disputed term.” *Phillips*, 413 F.3d at 1315 (*citing Vitronics Corp. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). Of course, the claims are “read in view of the specification, of which they are a part.” *Phillips* at 1315. Generally, however, it is a “cardinal sin” to read a limitation from the specification into the claims. *Id.* at 1320; *see also Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1346- 47 (Fed. Cir. 2015). This holds even if the specification describes only one embodiment. *Epos Techs. Ltd. v. Pegasus Techs. Ltd.*, 766 F.3d 1338, 1341 (Fed. Cir. 2014). Conversely, it is rarely correct to *exclude* from the scope of the claims a preferred embodiment of the specification: “a claim construction that excludes the preferred embodiment is rarely, if ever, correct.” *SynQor, Inc. v. Artesyn Techs., Inc.*, 709 F.3d 1365, 1378-79 (Fed. Cir. 2013) (quotations omitted).

Although a patent’s prosecution history is relevant to the claim construction analysis, any disclaimer of claim scope based on prosecution history must be “clear and unmistakable.” *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1325-26 (Fed. Cir. 2003).

Extrinsic evidence can play a role in the claim construction process. *Phillips*, 415 F.3d at 1320-21. Expert testimony may also be useful on subsidiary factual issues such as, for example,

the background science or the meaning of a term in the relevant art during the relevant time period. *Teva Pharmaceuticals USA v. Sandoz, Inc.*, 135 S.Ct 831, 841 (2015). But a court should not rely upon such evidence to interpret the claim terms where their meaning is clear from the intrinsic sources. Extrinsic evidence “may not be ‘used to contradict claim meaning that is unambiguous in light of the intrinsic evidence.’” *ArcelorMittal France v. AK Steel Corp.*, 700 F.3d 1314, 1320 (Fed. Cir. 2012) (quotations omitted); *see also Playtex Prods., Inc. v. Procter & Gamble Co.*, 400 F.3d 901, 907-08 (Fed. Cir. 2005).

B. Level of Ordinary Skill in the Art for the Asserted Patents

For the asserted patents, a person of ordinary skill in the art (“POSITA”) would have a Bachelor’s Degree in Computer Science or a related discipline and 3 to 5 years experience in software development. (Kruetzfeldt Decl. at ¶ 13.)

C. DISPUTED TERMS OF THE ‘397 AND ‘168 PATENTS

1. “virtual machine” – Claims 1, 2, 9, and 37 of the ‘397 Patent

Express Mobile’s Proposed Construction	BigCommerce’s Proposed Construction
an abstract machine that is not built in hardware but is emulated in software	<p>To the extent to which the “virtual machine” of the claims is a process virtual machine:</p> <p><i>software that emulates a hypothetical computer and runs compiled code</i></p> <p>To the extent to which the “virtual machine” of the claims is not limited to a process virtual machine:</p> <p><i>software that emulates a hypothetical or actual computer and runs compiled code</i></p>

a. Both the Intrinsic and Extrinsic Evidence Support Express Mobile’s Construction of “virtual machine”

At the time of the invention, the term “virtual machine” was a well-understood term of art, and the intrinsic record does nothing to limit the general definition understood by a POSITA.

Express Mobile’s proposed construction is drawn directly from a technical encyclopedia from the time of the invention, and is fully consistent with the intrinsic and extrinsic evidence.

Virtual machines were well known by the time of the invention to perform a variety of tasks and been developed for many different programming languages including Java, O-code, and Pascal.. (Kruetzfeldt Decl. at ¶ 32.) Virtual machines have since been developed for a number of other programming languages including Closure (a functional Lisp dialect), Apache Groovy (a dynamic programming and scripting language), JRuby (an implementation of Ruby), Jython (an implementation of Python), and Scala (a statically-typed, object-oriented and functional programming language). (*Id.* at ¶ 33.) In general, a “virtual machine” operates like its name connotes: it “virtualizes” in software certain functions that would otherwise be performed in hardware. (*Id.* at ¶ 34.) One advantage is flexibility within a computer system that would not exist solely in a more static hardware environment. (*Id.* at ¶ 35.) Express Mobile’s definition captures this broad understanding of the term “virtual machine,” and is fully consistent with both the intrinsic and extrinsic record.

First, Express Mobile’s definition comports with the overall claim structure of the ‘397 patent. The claims broadly recite a computer environment with a “browser and virtual machine” capable of generating displays. (*See, e.g.*, Ex. 1 at 65:45.) There is no restriction on the type of virtual machine, nor its functionality. The body of each independent claims similarly recites the term broadly, without modification or limitation. Claim 1, for example, recites that at least one of the user’s selection of settings for a web page “corresponds to commands of the virtual machine,” (*id.* at 65:53-54), and then related information is later used to “generate virtual machine commands” to render the web page (*id.* at 66:1). Each independent claim of the ‘397 patent follows this general structure. (*See id.* at 66:3-23; 68:43-67; 69:10-70:16.) The claims

thus support a broad definition of “virtual machine” consistent with its ordinary meaning to one of skill in the art. (Kruetzfeldt Decl. at ¶ 36.)

Express Mobile’s proposed construction is also consistent with the patents’ specification. The specification describes the use of an exemplary virtual machine in the form of a Java Virtual Machine, but also specifies that other programming languages can be used to practice the invention, particularly as browsers develop over time. (*See id.* at 32:21-25 (“Provisions are made in the invention so that as the then popular browsers support more robust versions of programming languages, those new capabilities can be employed to further enhance the capability of the invention.”); 62:33-36 (“As the full-featured programming languages supported by browsers evolve, the run time engine may be configured to respond to other user interactions . . .”).) One of ordinary skill in the art would expressly understand that a “full-featured programming language” would support a virtual machine. (Kruetzfeldt Decl. at ¶¶ 37-38.) Thus the patent specification contemplates the use of a variety of different virtual machines, with their various attendant functionalities.

The prosecution history also supports Express Mobile’s proposed construction. While the ‘397 claims were amended to add new claims reciting a “virtual machine,” the term itself was never limited to a specific type of virtual machine, or to a virtual machine having some sort of limited functionality relative to its general definition. (*See, e.g.*, Ex. 7 at 9-11.) On the contrary, as addressed in the following subsection, the Applicant’s remarks during prosecution confirm that the term “virtual machine” should obtain its broad meaning as understood in the art at the time of the invention.

The extrinsic evidence also supports Express Mobile’s proposed construction. Express Mobile’s definition is drawn directly from the entry for “virtual machine” in a leading technical encyclopedia—the Encyclopedia of Computers and Computer History—from the time of the

invention: “An abstract machine that is not built in hardware but is emulated in software.” (*See* Ex. 11 at ¶ 3.) This definition is consistent with other technical dictionaries from the time of the invention. (*See, e.g.*, Ex. 12 at 4 (“A processor emulated in software that executes the instructions of an invented machine language or pseudo-code.”); Ex. 13 at 3-4 (“An abstract computing machine for which an interpreter exists. Virtual machines are used to implement portable executors for high-level languages.”).) Express Mobile’s proposed construction captures this broad understanding of the term “virtual machine” to a POSITA at the time of the invention, without needlessly narrowing the meaning or weighing it down with features not necessarily present in all virtual machines. (Kruetzfeldt Decl. at ¶ 36.)

b. Defendant’s Proposed Construction Is Needlessly Complex, and Contrasts with the Intrinsic and Extrinsic Evidence

Defendant’s definition is confusing and imports extraneous limitations to the term. For example, the description of a virtual machine as a “hypothetical” computer would be confusing to a jury. Adding extraneous words that obscure, rather than clarify the meaning is naturally disfavored. *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1325 (Fed. Cir. 2003) *citing Hoganas AB v. Dresser Industries, Inc.*, 9 F.3d 948, 950 (Fed. Cir. 1993) (“It is improper for a court to add extraneous limitations to a claim, that is, limitations added wholly apart from any need to interpret what the patentee meant by particular words or phrases in the claim.”).

Defendant also seeks to narrow the definition of virtual machine so that “runs compiled code.” This proposed narrowing phrase appears to be result-oriented, offered not to clarify the meaning to the jury, but instead to manufacture a non-infringement argument. Specifically, Defendant’s proposed construction is targeted to restrict the invention to only virtual machines that use “compiled code” as the input, and exclude virtual machines that process other types of code, such as “interpreted code.”

There is no real dispute that virtual machines can utilize, as their input, various types of computer code. (Kruetzfeldt Decl. at ¶ 39.) One such type of code is compiled code (or more specifically, compiled bytecode). (*Id.* at ¶ 39.) But many virtual machines input other types of computer code, including “interpreted code” or even machine code. For example, in the Java Virtual Machine, the Java Native Interface allows machine dependent code to be passed into the virtual machine. (*Id.* at ¶ 40.) Defendants’ proposed construction would exclude all virtual machines that input these other types of code.

Defendant’s narrowing construction finds zero support in the intrinsic record. As set forth above, nothing in the claims themselves restricts the invention to virtual machines that use “compiled code.” (Ex. 1 at 65:44-66:24; 68:43-694; 69:10-70:16.)

Defendant’s proposed construction is also flatly inconsistent with the specification. The exemplary embodiment of the invention described in the specification uses the “Java” programming language and its related Java Virtual Machine (“JVM”). It was well understood at the time of the invention that the JVM runs both compiled *or* interpreted code. That is it runs interpreted code until it learns how to compile it. (Kruetzfeldt Decl. at ¶ 41.) The JVM, like many other virtual machines, can operate in a manner known as “just in time” compiling, which means that the input to the virtual machine is not compiled code, but instead that the code is compiled “on the fly.” (*Id.* at ¶ 42; *see also, e.g.*, Ex. 14.)

Defendant’s proposed construction, which would limit the invention to only virtual machines inputting “compiled code,” would thus read out the preferred embodiment. This result defies logic, and Federal Circuit case law strongly disfavors any such construction. “[A] claim interpretation that excludes a preferred embodiment from the scope of the claim is rarely, if ever, correct.” *Accent Packaging, Inc. v. Leggett & Platt, Inc.*, 707 F. 3d 1318, 1326 (Fed. Cir. 2013); *On-Line Techs., Inc. v. Bodenseewerk Perkin-Elmer GmbH*, 386 F.3d 1133, 1138 (Fed. Cir.

2004); *Globetrotter Software, Inc. v. Elan Computer Group, Inc.*, 362 F.3d 1367, 1381 (Fed. Cir. 2004), quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996); *see also Int'l Rectifier Corp. v. IXYS Corp.*, 361 F.3d 1363, 1371 (Fed. Cir. 2004); *Modine Mfg. Co. v. U.S. Int'l Trade Comm'n*, 75 F.3d 1545, 1550 (Fed. Cir. 1996).

The specification itself further demonstrates why Defendant's proposed construction is improper. In the exemplary embodiment, as the system prepares to render a web page for viewing by a user, some of the code (namely, the "run engine" and a library of "run time classes") is compiled, while other code ("the required set of class objects") is *not* compiled:

The customized run engine and a library of the referenced run time classes are compiled and converted into byte code at 165. Finally, the run time engine for the web site is created at 166. The required set of class objects required at run time is flagged for inclusion into the CAB/JAR file (See FIG. 27).

(Ex. 1 at 48:28-32; *see also* Kruetzfeldt Decl. at ¶ 43.)

The specification's subsequent text accompanying Figure 27 (referenced at the end of the excerpt above) confirms that the JAVA classes that have been "compiled" are flagged for inclusion in certain transmission files:

The feature flags are analyzed at 176 to determine which JAVA classes have been compiled (See FIG. 25). These class files are flagged for compression and inclusion in the library CAB and JAR Files.

(*Id.* at 44:41-45.)

In contrast, the specification again describes that the "objects" referenced above are *not* compiled, but instead simply compressed and included for transmission to the browser:

FIG. 27 describes the processes for creating the CAB and JAR Files (33 a of FIG. 4). The image objects, if any, which were defined on the first internal web page are analyzed at 175. If they are set to draw immediately upon the loading of the first web page, then they are flagged for compression and inclusion in the CAB and JAR Files.

(*Id.* at 44:36-41.)

Defendant relies on the prosecution history to support its proposed construction, but the prosecution history does the opposite. Initially, it should be noted that Defendant has an extremely high burden to show a “clear and unmistakable” disavowal of claim scope based on the Applicant’s arguments during prosecution. “The party seeking to invoke prosecution history disclaimer bears the burden of proving the existence of a ‘clear and unmistakable’ disclaimer that would have been evident to one skilled in the art.” *Trivascular, Inc. v. Samuels*, 812 F.3d 1056, 1063-64 (Fed. Cir. 2016); *see also Poly-America, LP v. API Industries, Inc.*, 839 F.3d 1131, 1136 (Fed. Cir. 2016) (“the standard for disavowal is exacting, requiring clear and unequivocal evidence that the claimed invention includes or does not include a particular feature”); *Openwave Sys., Inc. v. Apple Inc.*, 808 F.3d 509, 513-14 (Fed. Cir. 2015); *Omega Eng’g., Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323-26 (Fed. Cir. 2003).

Defendant cannot begin to meet this exacting standard here. On the contrary, the prosecution history establishes that “virtual machine” should obtain its ordinary broad meaning. During prosecution, the rejections and arguments centered around the prior art Faustini reference. (Kruetzfeldt Decl. at ¶ 30.) The Applicant argued that the invention differed from Faustini not because of the use of “compiled code” (which, if that distinction had been made, might have supported Defendant’s argument), but instead because the Faustini system generated all of the website “run time code” *during the creation stage*, so that it was available later for download:

In particular, web pages generated by Faustini result from a Faustini run time engine which is an interpreted or executable file, such as virtual machine commands, and ***which contains within the Faustini run time code all of the information necessary to generate a display (the display data is embedded within the Faustini run time code.)***

(Ex. 3 at 5.)

In the Faustini invention, all of the information necessary to generate a display is embedded in this “run time code.” (*Id.* at 5.) The full run time code is then stored by the system, for later download to a browser when the website was called by a browser. (*Id.* at 5.) As described by the Applicant during prosecution, the Faustini method was cumbersome and slow, requiring editing and “recompiling” the entire run time code after any edits:

Specifically, the claimed invention stores the attributes of the display separately from the run-time code, permitting the user of the claimed invention to change the attributes of the web page without requiring a recompilation of the run-time code. Thus for example, a change in a text string requires a new database entry and not the generation of a Faustini-like run-time code that as the attributed (sic) embedded in the run-time code.

(Ex. 3 at 5.)

In contrast, as described by the Applicant, the system of the Express Mobile patents stores information related to the *user settings*, separate from the run time code. These settings or “attributes” are then used by the system to render the web page:

As described in the specification of the claimed invention, ***the database contains user settings, which may be thought of as attributes of display objects. The run time engine is used to accept the attributes and generate virtual machine commands***, which then generate a display.

(*Id.* at 5.)

The advantage, as described by the Applicant, was to allow easier editing of the web page without the need to re-recreate or “recompile” the entire run time code:

In addition to having a smaller “footprint” (code size which is transmitted for display over a communication system), changes to the code during production are more easily implemented. Specifically, ***the claimed invention stores the attributes of the display separately from the run-time code, permitting the user of the claimed invention to change the attributes of the web page without requiring a recompilation of the run-time code.***

(*Id.* at 5.)

As can be see from the above quote, the focus of the distinction made over Faustini relates to making changes to the code during “production” of the web page, *i.e.*, during its

creation or editing. In contrast, in the invention of the ‘397 patent, editing the web page did not require recreation (“re-compiling”) the whole run time code again. Instead, one could simply update a database entry:

Thus for example, *a change in a text string requires a new database entry and not the generation of Faustini-like run-time code* that has the attributed (sic) embedded in the run-time code.

(*Id.* at 5.)

Thus the fundamental distinction between the Express Mobile invention and Faustini has nothing to do with “compiled code.” A POSITA would understand the lone reference to “re-compiling” in Faustini as a shorthand for the creation and storage of the full website code, which differs from the Express Mobile concept of storing information related to user settings in a database. (Kruetzfeldt Decl. at ¶ 44.) It has nothing to do with the input to the virtual machine during the *subsequent* stage of rendering the web page on a browser. (*Id.* at ¶ 45.) The point of the distinction made by the Applicant was not to restrict the type of code read by the virtual machine when rendering a web page, but instead relates to the *earlier processes* of web site creating, subsequent storage, and code transmission. (*Id.* at ¶ 45; *see also* Ex. 3 at 5-8.)

In short, nothing in the prosecution history rises to the level of “clear and unambiguous” disclaimer of virtual machines running something other than compiled code. On the contrary, the prosecution history—as with all the other intrinsic evidence—demonstrates that the inventor was *not* limiting virtual machine to inputting “compiled code,” as Defendant proposes.

2. “runtime engine” – Claim 1 of the ‘168 Patent

Express Mobile’s Proposed Construction	BigCommerce’s Proposed Construction
a file that is executed at runtime that facilitates retrieval of information from the database and generates commands to display a web page or website	a file containing compiled code that, when executed, generates virtual machine commands to dynamically produce a web page

Express Mobile derives its construction of “runtime engine” directly from the intrinsic record. In contrast, BigCommerce relies on selective references to technical dictionaries, and seeks to read in limitations that appear only within exemplary embodiments of the specification.

Express Mobile’s proposed construction comports with the overall structure of the claims themselves. The term “runtime engine” appears in claim 1 of the ‘168 patent, which recites: “a web browser with access to a *runtime engine* is configured *to generate the web-site from the objects and style data extracted from the provided database.*” (Ex. 2 at 65:3-6.) Plaintiff’s proposed construction of runtime engine reflects the same concept: “a file that facilitates retrieving information from the database and generates commands to create the web page.”

This is corroborated by the specification of the ‘168 patent, which teaches this same functionality for the run time engine:

The web page(s), when viewed by a web surfer, are activated by the browser calling the customized run time engine at 10. *The run time engine then begins to read the database and down load image, audio and video files, while simultaneously drawing the first web page for viewing or user interaction* at 11.

(*Id.* at 5:49-68.)

The specification reiterates this functionality throughout. (*See id.* at 8:12-15: “The customized and optimized run time engine (run time engine 377) generates the web pages for the web site and is activated from the user’s server.”; *see also id.* at 45:6-8: “FIG. 29 shows the techniques employed by the run time engine to read the external database and to generate the necessary web page objects (35 of FIG. 4).”)

Express Mobile’s construction is also consistent with the prosecution history. The claims were never amended during prosecution to recite any specific functionality of “runtime engine” beyond what is broadly described in the specification and recited in the claims. The Applicant never made any argument limiting the form or features of a runtime engine.

In contrast, Defendant’s proposed construction seeks to limit the claims to one of the embodiments of the specification, in which the run time engine happens to be “compiled.” (Ex. 1 at 43:28-32.) But limiting the claims to a single embodiment of the specification is one of the “cardinal sins” of claim construction. *Phillips*, 413 F.3d at 1320.

Moreover, Defendant’s proposal would effectively read out of the claims one of the preferred embodiments. One of ordinary skill in the art would understand that the run time engine is one of the run time files input to the virtual machine. (Kruetzfeldt Decl. at ¶ 47.) As set forth above, many virtual machines read and process code and data whether that code is “compiled” code or differently constructed. (*Id.* at ¶ 39-41.) This includes the JVM used in the exemplary embodiment of the specification. (*Id.* at ¶ 40.) Thus limiting the runtime engine to having “compiled code” is a backdoor effort to limit the term “virtual machine” in a manner would effectively exclude one of the preferred embodiments of the patent, an extremely disfavored result. *See Accent*, 707 F. 3d at 1326; *On-Line Techs*, 386 F.3d at 1138; *Globetrotter*, 362 F.3d at 1381, *Vitronics*, 90 F.3d at 1583; *Int’l Rectifier.*, 361 F.3d at 1371; *Modine*, 75 F.3d at 1550. In contrast to Defendant’s proposed construction, there should be no restriction on whether the runtime engine contains “compiled” code or any other type of code.

The prosecution history of the Express Mobile patents also contradicts, rather than supports, Defendant’s attempted restriction to runtime engines containing “compiled” code. As set forth above, in distinguishing Faustini, the applicant made clear that the invention did not hinge on the type of code inputted to the virtual machine. Instead, the invention stores information related to user settings in the database, and the runtime engine (unlike Faustini) uses the information in the database to generate the web page display. Nothing in the prosecution history limits the type of code included in the runtime engine.

3. “contemporaneously” – Claim 37 of the ’397 Patent

Express Mobile's Proposed Construction	BigCommerce's Proposed Construction
in the same time period, from a human perspective	happening at the same period of time

Both parties reference dictionary definitions to construe the term “contemporaneously,” but only Express Mobile’s construction is consistent with the intrinsic record. Defendant’s proposal ignores the specification and is inconsistent with even the preferred embodiments.

The first portion of Express Mobile’s proposed claim construction is drawn from dictionaries from the time of the invention. The Dictionary.com definition (which is based on the Random House Unabridged Dictionary) for “contemporaneous,” is “living or occurring during the same period of time.” (Ex. 15.)

As a practical matter, Defendant’s proposed construction largely tracks Plaintiff’s proposal, and is derived from similar resources. The real dispute boils down to Defendant’s omission of the phrase “from a human perspective.” However, the intrinsic record confirms that this is how “contemporaneously” should be measured, not from some near-instantaneous nano-second point of view of computer processors.

The term “contemporaneously” appears within claim elements relating to web creation or editing. Specifically, as the user selects settings for the web site during the creation process, the system updates the display “contemporaneously” as the settings are accepted:

generate the display in accordance with said assembly of settings contemporaneously with the acceptance thereof, at least one of said user selectable settings of said panel of settings being operable to generate said display through commands to said virtual machine

(Ex. 1 at 68:54-58)

The specification describes how this process happens. Specifically, it teaches that, in the preferred embodiment, a polling technique is used to determine if the user has made changes.

(Ex. 1 at FIG. 9; 22:66-23:2.) If so, then the system shows those changes. (*See, e.g.*, 24:32-36;

41-45; 52-54; 57-59.) Importantly, the specification teaches that the results appear “contemporaneously” *from a “human perception” or “ergonomic” point of view*:

A polling loop is defined in the panel's (panel 400) JavaScript that creates a near continuous, *at least from a human perception point of view*, dynamic real time link, in order to monitor events occurring inside the build engine. The result is a real time retrieval (*from an ergonomic perception point of view*) of necessary data and status settings from the build engine back to the interface.

(Ex. 1 at 23:21-27.) Defendant seeks to read this notion out of the term, which would (presumably) generate a potential non-infringement argument by requiring near-instantaneous updating of the user’s screen when changes are made. The specification establishes, however, that the screen updating only takes place “contemporarily” from a human perspective.

In effect, the patentee has acted as his own lexicographer for this term, making clear what it means in the context of the invention. It is axiomatic in patent law that a patentee may act as his own lexicographer and use terms in a manner contrary to one or more of the term’s ordinary meaning. *See, e.g., Phillips v. AWH Corp.*, 415 F. 3d 1303, 1316 (Fed. Cir. 2005) (“the specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess”); *see also Vitronics*, 90 F. 3d at 1582; *Hormone Research Foundation v. Genentech, Inc.*, 904 F. 2d 1558, 1563 (Fed. Cir. 1990).

Plaintiff’s proposed construction also comports with common sense. The relevant feature here is the *user’s* experience, not some metaphysical timetable taking place at the processor level. (Kruetzfeldt Decl. at ¶ 49.) If the user sees the screen updating “contemporaneously” from his or her perspective, nothing more is required to satisfy the object of the “what you see is what you get” feature of the invention, the purpose of which is to assist the user in creating or editing the web page. (*Id.* at ¶ 50.)

Defendant’s construction is flawed because it ignores this express teaching from the specification. Defendant’s proposal could, arguably, restrict the claims to implementations

where the screen update occurs virtually instantly, within a few clock times of the processor.

This overly narrow construction would read out the very preferred embodiment described in the specification, and should be rejected. *Accent*, 707 F. 3d at 1326; *On-Line Techs*, 386 F.3d at 1138; *Globetrotter*, 362 F.3d at 1381, quoting *Vitronics*, 90 F.3d at 1583; *Int'l Rectifier.*, 361 F.3d at 1371; *Modine*, 75 F.3d at 1550.

As seen below, Defendant reserves the concept of “human perspective” to claims reciting the phrase “substantially contemporaneously” (a similar term used in different asserted claims). But one of ordinary skill would understand that the specification teaches that the human perspective is the touchstone for the “what you see is what you get” updating of the display, regardless of whether that relevant claim recites only the term “contemporaneously” or the larger phrase “substantially contemporaneously.” It would be improper to read that human perspective point of view out of claims using either of those terms. (Kruetzfeldt Decl. at ¶ 50.)

4. “substantially contemporaneously” – Claims 1 and 2 of the ’397 Patent

Express Mobile’s Proposed Construction	BigCommerce’s Proposed Construction
substantially in the same time period, from a human perspective	happening at the same period of time from a human perspective
	Otherwise, indefinite

Express Mobile’s proposed construction is consistent with the claim language and the intrinsic record. Its proposal flows directly from the construction of “contemporaneously,” as set forth above, and then includes the word “substantially” just like the claim. This arrangement is logically consistent, and gives meaning to each word of the claim. *Merck & Co. v. Teva Pharm. USA, Inc.*, 395 F.3d 1364, 1372 (Fed. Cir. 2005) (“A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so”).

Defendant's construction concedes, at some level, that the timing of updating the display during the creation or editing process should focus on the human perspective. But Defendant seeks to limit this concept to the term "substantially contemporaneously." As set forth above, this narrow view of the claims would be inconsistent with the intrinsic record and the understanding of one of ordinary skill in the art.

Defendant seeks to bootstrap its construction with an alternate contention of invalidity, but this argument also fails. Specifically, Defendant asserts that, if a construction other than its proposal is adopted, the claim would be indefinite because of the word "substantially." This argument is flatly contradicted by numerous cases.

The use of relative terms like "substantially" is widely accepted in patent claims. *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1370 (Fed. Cir. 2014) ("Claim language employing terms of degree has long been found definite where it provided enough certainty to one of skill in the art when read in the context of the invention."); *see also Pall Corp. v. Micron Seps.*, 66 F.3d 1211, 1217, (Fed. Cir. 1995) ("like the term 'about,' the term 'substantially' is a descriptive term commonly used in patent claims to 'avoid a strict numerical boundary to the specified parameter'") (citations omitted).)

Recently, in *ONE-E-WAY, INC. v. International Trade Commission*, for example, the Federal Circuit confirmed that relative terms like "substantially" do not render a claim invalid so long as they would be understood by one of ordinary skill in the art.

For example, in 1923, the Supreme Court "uph[eld] as definite a patent for an improvement to a paper-making machine, which provided that a wire be placed at a 'high' or 'substantial elevation.'" *Nautilus*, 134 S. Ct. at 2129 n.5 (citing *Eibel Process*, 261 U.S. at 58). The Court explained that *these relative terms—“substantial” and “high”—were sufficiently definite because “readers . . . skilled in the art of paper making and versed in the use of the . . . machine” would have “no difficulty . . . in determining . . . the substantial [elevation] needed’ for the machine to operate as specified.”* *Id.* (quoting *Eibel Process*, 261 U.S. at 65-66).

ONE-E-WAY, INC. v. ITC, 859 F.3d 1059, 1062-63 (Fed. Cir. 2017).

The claims at issue here fall within these standards. One of ordinary skill in the art would understand that the phrase “substantially contemporaneously” requires some form of updating as changes are made to a web page during creation or editing, and distinguishes the invention from systems in which the screen is static when changes are made. (Kruetzfeldt Decl. at ¶ __.)

5. “multidimensional array” – Claims 3 and 4 of the ’397 Patent and Claim 1 of the ’168 Patent

Express Mobile’s Proposed Construction	BigCommerce’s Proposed Construction
an indexed set of related elements, wherein each element is addressed by a set of two or more indices	an indexed set of related elements, wherein each element is addressed by an expression consisting of the array name followed by a set of two or more indices, each index corresponding to a dimension of the array

The parties’ constructions on the tem “multidimensional array” share some consistency, but Defendants again seek to read into the claims exemplary features that are present in some multidimensional arrays, but not all. The result is an overly narrow construction apparently designed to exclude Defendant’s system from the scope of the claims.

The language common to both parties’ proposals is supported by numerous technical definitions of “array” from around the time of the invention. (*See, e.g.*, Ex. 16 (“An arrangement of data in one or more dimensions”); Ex. 17 (“An ordered arrangement of information in which the location of any item is described by two numbers (integers) identifying its position in a particular row and column of a matrix.”); Ex. 18 (“In programming, a fundamental data structure consisting of a single or multidimensional table”); Ex. 19 (“A two- or three- dimensional matrix of data values”).)

Defendant’s proposal incorporates narrowing features from one particular dictionary definition, namely that each entry is addressed as an “expression,” that it includes the “array

name,” and that the array name is “followed by” other information. (*See* Ex. 17.) These narrow features are not present in any of the other extrinsic resources from the time identified by the parties. They would exclude many other types of multidimensional arrays that address information using different techniques. (Kruetzfeldt Decl. at ¶ 55.)

Defendant’s selective incorporation of narrow features from one extrinsic source should be rejected. None of these details are set forth within the claims themselves, nor does the rest of the intrinsic record support narrowing the claims to include such features. Even the extrinsic resources, as a whole, establish that Defendant’s tactical reliance on one particular definition should be rejected.

6. “multidimensional array structured database” – Claim 3 of the ’397 Patent and Claim 1 of the ’168 Patent

Express Mobile’s Proposed Construction	BigCommerce’s Proposed Construction
No construction necessary other than the separate constructions of “multidimensional array” and “database”	a database (see separate construction of “database”), wherein the records are structured such that any record may be addressed by an expression consisting of the array name followed by a set of two or more indices, each index corresponding to a dimension of the array

There is no need to construe this phrase beyond construing the terms “multidimensional array” and “database,” which are already subject to separate discussion. Effectively, Defendant seeks to construe the term “structured” by including the same word—“structured”—within its proposed definition. Defendant also seeks to include *its own* proposed construction of “multidimensional array” within the text here, but then references what presumably would be the final construction of “database.” The result is a confusing amalgam of text that is vastly more complicated than the claim language itself. It also includes Defendant’s own proposal of

“multidimensional array,” which as set forth above is overly narrow and should be rejected. For these reasons, Defendant’s proposed construction of this phrase should be rejected.

7. “database” – Claims 1, 2, 3, 9, and 37 of the ’397 Patent and Claim 1 of the ’168 Patent

Express Mobile’s Proposed Construction	BigCommerce’s Proposed Construction
an electronic information storage system offering data storage and retrieval	a file composed of records, each containing fields together with a set of operations for searching, sorting, recombining, and other functions

Express Mobile’s proposed construction of “database” is supported by intrinsic and extrinsic evidence, and reflects the understanding of a POSITA the time of the invention. Defendant’s proposal limits the term to only certain databases that have specified functionality (and some unnamed “other” functions).

Express Mobile’s construction recognizes that at the time of the invention in late 1990s, databases could be complex or could be very simple. (Kruetzfeldt Decl. at ¶ 57.) Express Mobile’s construction captures both. This broad construction is consistent with the understanding of a POSITA at the time of the invention. (*Id.* at ¶ 57.)

Express Mobile’s construction is also consistent with the intrinsic record. The claims themselves recite no limits on what the database looks like or how it is configured. Claim 1 is exemplary; it recites:

(c) ***storing information representative of said one or more user selected settings in a database;***

(d) generating a website at least in part by ***retrieving said information representative of said one or more user selected settings stored in said database;***
and

(Ex. 1 at 65:59-63.) Nothing here limits the type of database encompassed by the claims.

The specification likewise uses term broadly, to capture databases of varying functionality. “A run time generation procedure creates a compressed program customized run time engine file, with an associated database and a build engine generated HTML Shell File.” (Ex. 1 at 2:38-41.) “The interface then calls an engine method to read the external database, and then to return the necessary values from that database in order to update the interface’s database.” (Ex. 1 at 40:48-51.)

Additionally, nothing in the prosecution history limits the term database. The term “database” always appeared in one or more claims and was never added to the claims. The specific nature of the database was never the subject of any argument over the prior art.

Defendant’s construction is not only inconsistent with the understanding of one of skill in the art, but also includes a fatal flaw. As to the first point, Defendant’s construction would add in functionality that, while exemplary of some databases from the time, would exclude others that might not have the same functionality. (Kruetzfeldt Decl. at ¶ 58.) For example, not all databases of the time had the capability of “recombining” files. (*Id.* at ¶ 58.)

Moreover, Defendant’s is fundamentally flawed because it imports wholesale ambiguity into the term, by requiring a database to include “other functions.” Defendant’s proposed construction provides no guidelines regarding what constitutes an acceptable “other function,” and thus no guidance as to what falls within the scope of the claim versus what does not. This is the essence of indefiniteness, one that arises not from the claim itself, but instead would arise exclusively from Defendant’s flawed proposal. A construction that would needlessly render the claim invalid should be rejected. *Modine Mfg. Co. v. US Intern. Trade Com’n*, 75 F.3d 1545, 1557 (Fed. Cir. 1996) (“When claims are amenable to more than one construction, they should when reasonably possible be interpreted so as to preserve their validity.”).

8. “external database” – Claim 37 of the ‘397 Patent

Express Mobile's Proposed Construction	BigCommerce's Proposed Construction
a database (see separate construction of "database" term) external to the build tool	a database (see separate construction of "database" term) external to the build tool created from corresponding data in the internal database

The parties agree on part of this construction, but Defendant seeks to read into the claims a limitation that the specification expressly notes is exemplary.

There is no dispute that the "external database" refers to a database "external to the build tool," as reflected in both parties' constructions. This language dovetails with the parties' agreed-upon construction of "internal database," as one that is "internal to the build tool."

There is also no dispute that the external database *contains* information corresponding to information in the internal database. The claim itself recites exactly that: "an external database *containing* data corresponding to said information stored in said internal database." (Ex. 1 at 68:65-66.) Because this language appears already in the claim itself, there is no need to include it within the definition of the isolated term "external database."

Defendant seeks to rely on the specification to limit the construction to where an external database is always "created." This description accompanies Figure 24, for example, in which the specification references "the creation of the external database." (*Id.* at 40:62-63.) But Figure 24 is expressly described as just one implementation of an external database:

FIG. 24 is a flow chart showing a detailed view of an external database in accordance with one implementation of the present invention and also shows the security and optimization techniques that can be employed.

(*Id.* at 4:57-60.) Defendant's efforts to read in this exemplary embodiment are improper.

Phillips, 415 F.3d at 1320.

IV. CONCLUSION

For the foregoing reasons, Express Mobile respectfully requests the Court enter an order adopting Express Mobile's proposed constructions for the disputed claim language of the '397 and '168 patents.

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DEVLIN LAW FIRM LLC

/s/ Timothy Devlin

Timothy Devlin

Robert Kiddie

1306 N. Broom Street, First Floor

Wilmington, DE 19806

(302)-449-9010

tdevlin@devlinlawfirm.com

rkiddie@devlinlawfirm.com

Counsel for Express Mobile, Inc.

CERTIFICATE OF SERVICE

The undersigned attorney hereby certifies that all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via electronic filing on November 21, 2017.

/s/ Timothy Devlin

Timothy Devlin